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APPLICATION 1	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,401		03/05/2002	Kelan C. Silvester	42390P13005	7956
8791	7590	04/11/2006		EXAMINER	
		LOFF TAYLOR &	CERVETTI, DAVID GARCIA		
	12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			ART UNIT	PAPER NUMBER
LOS AN				2136	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/092,401	SILVESTER, KELAN C.				
Office Action Summary	Examiner	Art Unit				
	David G. Cervetti	2136				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
3) Since this application is in condition for allowar	- · · · · · · · · · · · · · · · · · · ·					
Disposition of Claims						
4) ⊠ Claim(s) <u>1-36</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-36</u> is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on <u>05 March 2002</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	a)  accepted or b)  objected to drawing(s) be held in abeyance. Sec ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

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#### **DETAILED ACTION**

1. Applicant's arguments filed October 11, 2005 and January 31, 2006, have been fully considered but they are not persuasive.

2. Claims 1-36 are pending and have been examined.

## Response to Amendment

- 3. Applicant argues, but the claimed language fail to claim, that the environment where the invention is taking place is an ad-hoc, Bluetooth network. Nowhere in the claimed language is there a mention of a network, ad-hoc, or Bluetooth.
- 4. Applicant's arguments fail to point how the invention is different from the combination of the prior art. On pages 17-18 of the amendment filed on October 11, 2005, Applicant admits the Bluetooth System Specification teaches the claimed invention with the sole exception of a user having an interface to submit audio to be used for identification/authentication purposes (biometrics). Furthermore, the use of speech recognition was conventional and well known at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a speech recognition interface to a wireless device for users to be able to speak audio authentication initialization information.

  Furthermore, wireless devices providing speech recognition were conventional and well known at the time the invention was made. Applicant's arguments that the instant application allows a user to use speech recognition to enter audio authentication initialization information as a key corresponding to a wireless device are not persuasive.

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#### Information Disclosure Statement

5. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. Examiner requests that Applicant submits a copy of the references cited in the specification.

## **Drawings**

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "350" and "358" have both been used to designate "LINK MANAGER" (on amended paragraph 57). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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#### Specification

7. The disclosure is objected to because of the following informalities: "API" (on amended paragraph 64). This term has not been defined. Appropriate correction is required.

## Claim Objections

8. Claim 20 is objected to because of the following informalities: "according to challenge and response scheme", perhaps "according to the challenge and response scheme" was intended. Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 10. Claims 4 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Compressing data (audio device identification information) and generating a hash value.
- 11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1, 4 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 11 recite the limitation "the detected device". There is insufficient antecedent basis for these limitations in the claims.

Claim 4 recites the limitation "the received audio device identification information". There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: "receiving audio authentication initialization information from the detected device".

## Claim Rejections - 35 USC § 103

- 13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 14. Claims 1-20 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluetooth (NPL "Specification of the Bluetooth System", hereinafter Bluetooth), and further in view of Cook et al. (US Patent 6,718,172, hereinafter Cook) and Rowland et al. (US Patent Application 2002/0129264, hereinafter Rowland).

Regarding claims 1 and 11, Bluetooth teaches authenticating, by a host device, a detected wireless device according to a challenge and response scheme regarding an authentication key of the detected wireless device (pages 168-171, 194-197); storing,

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by the host device, the authentication key of the detected wireless device to enable a challenge and response scheme for subsequent authentication of the detected wireless device (pages 150-167). Bluetooth does not expressly disclose if the detected device fails authentication, requesting audio authentication initialization information from the detected device; authenticating the detected device based on the requested audio authentication initialization information. However, Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67) and Rowland teaches switching authentication methods (paragraphs 68-91). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use audio authentication and to switch authentication methods. One of ordinary skill in the art would have been motivated to do so to provide a friendly interface for users to enter information (Cook, column 1, lines 15-67, column 2, lines 1-17) and to provide for fail-over authentication methods (Rowland, paragraphs 68-79).

Regarding claims 2 and 12, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches receiving a device authentication set-up request from a user of a wireless device; requesting authentication initialization information for the detected wireless device; and storing the received authentication initialization information as an authentication initialization token for the detected wireless device (pages 148-173), and Cook teaches entering audio authentication information (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 3 and 13, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 2 and 12 respectively above.

Furthermore, Bluetooth teaches storing the authentication initialization token within the detected wireless device (pages 148-173).

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Regarding claims 4 and 14, the combination of Bluetooth, Cook, and Rowland does not expressly disclose compressing the received audio device identification information; and generating a hash value of the compressed audio device identification information to form the authentication initialization token of the wireless device.

However, Examiner takes Official Notice that the use of compression of identification information and generating hash values of identification information was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to compress the received audio device identification information; and to generate a hash value of the compressed audio device identification information to form the authentication initialization token of the wireless device since Examiner takes Official Notice that it was conventional and well known.

Regarding claims 5 and 15, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches polling a surrounding area of the host device for sources within a pre-determined distance of the host device; and when a source is detected, initiating an authentication handshake with a source device of the detected

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source (Service Discovery Protocol), and Cook teaches entering audio authentication information (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 6 and 16, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches requesting the device identification information from the detected wireless device; comparing the requested device identification information with stored device authentication information within the host device; when matching device authentication information is found, establishing a link with the detected wireless device; and otherwise, initiating a request for authentication initialization information of the detected wireless device (pages 148-173), and Cook teaches entering audio authentication information (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 7 and 17, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches receiving device identification information as the requested authentication initialization information; compressing the received device identification information; generating a hash value of the compressed device identification information to form a requested device authentication initialization token; comparing the requested device authentication initialization token to one or more stored device authentication initialization tokens; and when a matching stored authentication initialization token is detected, storing the authentication key of the detected wireless device as a device authentication token (pages 148-173), and Cook teaches entering audio authentication information (column 7, lines 1-67, column 8, lines 1-67).

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Regarding claims 8 and 18, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches receiving an authentication token as the requested authentication information of the detected wireless device; comparing the received authentication token to one or more stored authentication tokens; when a matching stored audio authentication token is detected, establishing an audio link with the detected wireless device; and storing the authentication key as a device authentication token of the detected wireless device (pages 148-198), and Cook teaches entering audio authentication information (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 9 and 19, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 8 and 18 respectively above.

Furthermore, Bluetooth teaches otherwise, requesting manual authorization from a user of the host device to authenticate the detected wireless device; when the user provides manual authentication authorization, storing the authentication key as a device authentication token of the detected wireless device; and establishing an audio link between the detected wireless device and the host device (pages 151-157).

Regarding claims 10 and 20, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claims 1 and 11 respectively above.

Furthermore, Bluetooth teaches requesting an authentication token from the detected wireless device; and receiving one of an authentication key and a device identification code and a device personal identification number from the detected wireless device as the requested device identification information (pages 148-198).

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Regarding claim 31, Bluetooth teaches an authentication unit to authenticate at least one wireless device detected within communications range of the apparatus using authentication initialization information of the detected wireless device, a challenge and response scheme for authentication according to an authentication key of the detected wireless device fails to authenticate the detected wireless device (pages 148-198); a communications interface coupled to the authentication unit, the communications interface to establish links with authenticated wireless devices, request device authentication information as well as device authentication initialization information from detected wireless devices (pages 148-198); and a storage device coupled to the authentication unit, containing an authentication initialization token as well as an authentication key for each wireless device initialized by the apparatus (pages 148-198). Bluetooth does not expressly disclose if a challenge and response scheme according to a key fails, using audio authentication. However, Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67) and Rowland teaches switching authentication methods (paragraphs 68-91). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use audio authentication and to switch authentication methods. One of ordinary skill in the art would have been motivated to do so to provide a friendly interface for users to enter information (Cook, column 1, lines 15-67, column 2, lines 1-17) and to provide for failover authentication methods (Rowland, paragraphs 68-79).

Regarding claim 32, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claim 31 above. Furthermore, Bluetooth teaches a

device initialization unit to request device identification information in response to a device authentication set-up request from a user of a wireless device and store the received device identification information as an authentication initialization token of the wireless device (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

Regarding claim 33, the combination of Bluetooth, Cook, and Rowland teaches the limitations as set forth under claim 31 above. Furthermore, Bluetooth teaches wherein the authentication unit compares a received authentication initialization token to one or more stored authentication initialization tokens, establishes an link with a detected wireless device when a matching stored authentication initialization token is detected, and stores requested device identification information of the detected wireless device as an authentication key (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

15. Claims 21-30 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluetooth, and further in view of Cook.

Regarding claims 21 and 26, Bluetooth teaches receiving, by a wireless device, a communications connection request from a host device; engaging in a challenge and response scheme with the host device according to authentication information held by the wireless device to enable the host device to authenticate the wireless device; if a request for authentication initialization information is received from the host device, providing authentication initialization information to the host device; and once the authentication initialization information is authenticated by the host device, establishing

an audio link between the wireless device and the host device (pages 148-198).

Bluetooth does not expressly disclose audio authentication initialization information.

However, Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use audio authentication. One of ordinary skill in the art would have been motivated to do so to provide a friendly interface for users to enter information (Cook, column 1, lines 15-67, column 2, lines 1-17).

Regarding claims 22 and 27, the combination of Bluetooth and Cook teaches the limitations as set forth under claims 21 and 26 respectively above. Furthermore, Bluetooth teaches receiving a request for authentication information of the wireless device; providing the requested authentication information to the host device (pages 148-198). Bluetooth does not expressly disclose switching authentication methods. However, Examiner takes Official Notice that switching authentication methods was conventional and well known. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to switch authentication methods when a first authentication method failed since Examiner takes Official Notice that it was conventional and well known.

Regarding claims 23 and 28, the combination of Bluetooth and Cook teaches the limitations as set forth under claims 22 and 26 respectively above. Furthermore, Bluetooth teaches requesting authentication initialization information from a user of the wireless device; receiving device identification information from the user as the authentication initialization information; and providing the device identification

information to the host device as the requested authentication initialization information (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 24 and 29, the combination of Bluetooth and Cook teaches the limitations as set forth under claims 22 and 27 respectively above. Furthermore, Bluetooth teaches selecting a stored authentication initialization token; and transmitting the authentication initialization token to the host device (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

Regarding claims 25 and 30, the combination of Bluetooth and Cook teaches the limitations as set forth under claims 21 and 26 respectively above. Furthermore, Bluetooth teaches receiving a device authentication set-up request from a user of the wireless device; requesting, from the user, device identification information as authentication initialization information of the wireless device; and once the device identification information is received from the user, storing the device identification information as an authentication initialization token of the wireless device (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

Regarding claim 34, Bluetooth teaches a host device (pages 168-171, 194-197); and one or more wireless devices (pages 168-171, 194-197), each wireless device including: a processor having circuitry to execute instruction (pages 168-171, 194-197); and a storage device having a sequence of instructions stored therein, which when executed by the processor causes the processor to: engage in a challenge and

response scheme with the host device according to authentication information held by the wireless device to enable the host device to authenticate the wireless device (pages 168-171, 194-197); request an authentication initialization information from a user of the wireless device if an authentication initialization request is received from the host device (pages 148-198); receive a device identification from the user (pages 148-198); and provide the device identification to the host device as the requested authentication initialization information (pages 148-198). Bluetooth does not expressly disclose audio authentication initialization information. However, Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use audio authentication. One of ordinary skill in the art would have been motivated to do so to provide a friendly interface for users to enter information (Cook, column 1, lines 15-67, column 2, lines 1-17).

Regarding claim 35, the combination of Bluetooth and Cook teaches the limitations as set forth under claim 34 above. Furthermore, Bluetooth teaches an authentication unit to authenticate wireless devices detected within communications range of the host device using authentication information of the detected wireless devices (pages 148-198); a communications interface coupled to the authentication unit, the communications interface to establish links with authenticated wireless devices, request device identification information as well as authentication initialization information from detected wireless devices (pages 148-198); and a storage device coupled to the authenticating unit, containing an authentication initialization tokens as

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well as device identification information for each wireless device initialized by the host device (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

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Regarding claim 36, the combination of Bluetooth and Cook teaches the limitations as set forth under claim 34 above. Furthermore, Bluetooth teaches wherein the host device further comprises: a device initialization unit to request a device identification in response to a device authentication set-up request from a user of a wireless device and store received device identification information as an authentication initialization token for the wireless device (pages 148-198) and Cook teaches using audio authentication (column 7, lines 1-67, column 8, lines 1-67).

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#### Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gerson (US Patent 6,868,385) teaches using a speech recognition front end and server for providing control signals in a wireless environment. Chuang-Sung et al. (US Patent 5,918,066) teaches displaying configuration information through a speaker. Lemiläinen et al (US Patent 6,766,160) teaches authenticating a Bluetooth device to a host.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-

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5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off

on Wednesday.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the 20.

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**DGC** 

CHRISTOPHER REVAK PRIMARY EXAMINER

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